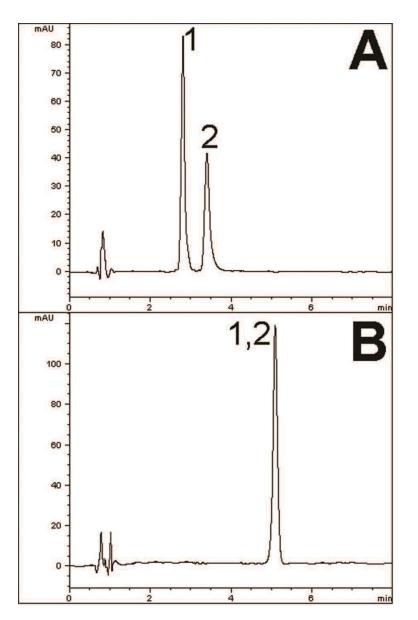
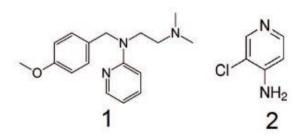


## Pyrilamine & 4-Amino-3-Chloropyridine analysis with HPLC - AppNote

## **Unique Selectivity on a Cogent Amide Stationary Phase**

The Cogent Amide column offers unique selectivity that may not be readily attainable with other phases. Two test solutes shown in this application note (*Pyrilamine and 4-Amino-3-Chloropyridine*) were baseline separated on the Cogent Amide column (*Figure A*), but they co-eluted with no resolution on a different Cogent column using otherwise equivalent method conditions (*Cogent Diamond Hydride*<sup>TM</sup>, *Figure B*). The presence of the Amide ligand provides additional selectivity that can make a significant difference in resolving closely- eluting compounds such as these.





**Peaks:** 1. Pyrilamine 2. 4-Amino-3-Chloropyridine

## **Method Conditions**

Column: Cogent Amide™, 4µm, 100Å
Catalog No.: 40036-05P
Dimensions: 4.6 x 50mm
Mobile Phase:

A: 90% DI Water / 10% Acetonitrile / 0.1% Formic Acid (v/v)
B: B: Acetonitrile / 0.1% Formic Acid (v/v)

Gradient:

Time ( <i>Minutes</i> )	%B
0	90
1	90
7	50
8	90

Post Time: 3 minutes Flow rate: 1.0 mL/minute Detection: UV 244 nm Injection vol.: 2µL Sample Preparation:

100 mg/L Pyrilamine and 4-Amino-3-Chloropyridine reference standards in diluent of 50/50 solvent A/solvent B. Peak identities confirmed with individual standards.

*Note:* Amine-containing compounds such as Pyrilamine and 4-Amino-3-Chloropyridine can be difficult to analyze using conventional silica- based stationary phases. These columns have residual silanol groups on the surface that can interact electrostatically with Amines, causing peak tailing. Chromatographers use a number of strategies to avoid these issues, such as use of ion pair agents or endcapping. However, Cogent TYPE-C Silica phases are virtually free of silanols, and therefore good peak shapes can be obtained without these workaround method strategies.



## Attachment

No 352 Pyrilamine and 4-Amino-3-Chloropyridine.pdf 0.4 Mb Download File

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